Simple Elegance

BY LARRY OKREND

A table with few parts and uncomplicated joinery proves that less is more

This mahogany drop-leaf console table is ideal for placement behind a sofa or in an entryway. Because the design consists of simple joinery and few parts, you can easily adjust the size to suit your setting.

Furniture that's easy to make can tend to be visually clunky, and graceful furniture has a reputation for being too difficult for the home woodworker to build. With that in mind, our design team accepted the challenge to create a table that featured flowing lines but simple construction.

Starting with straight lines and pleasing proportions, we simply added a few curves and tapers to various pieces. The result is a table that requires only moderate skill to build, but everyone who sees it will think you're a woodworking genius.

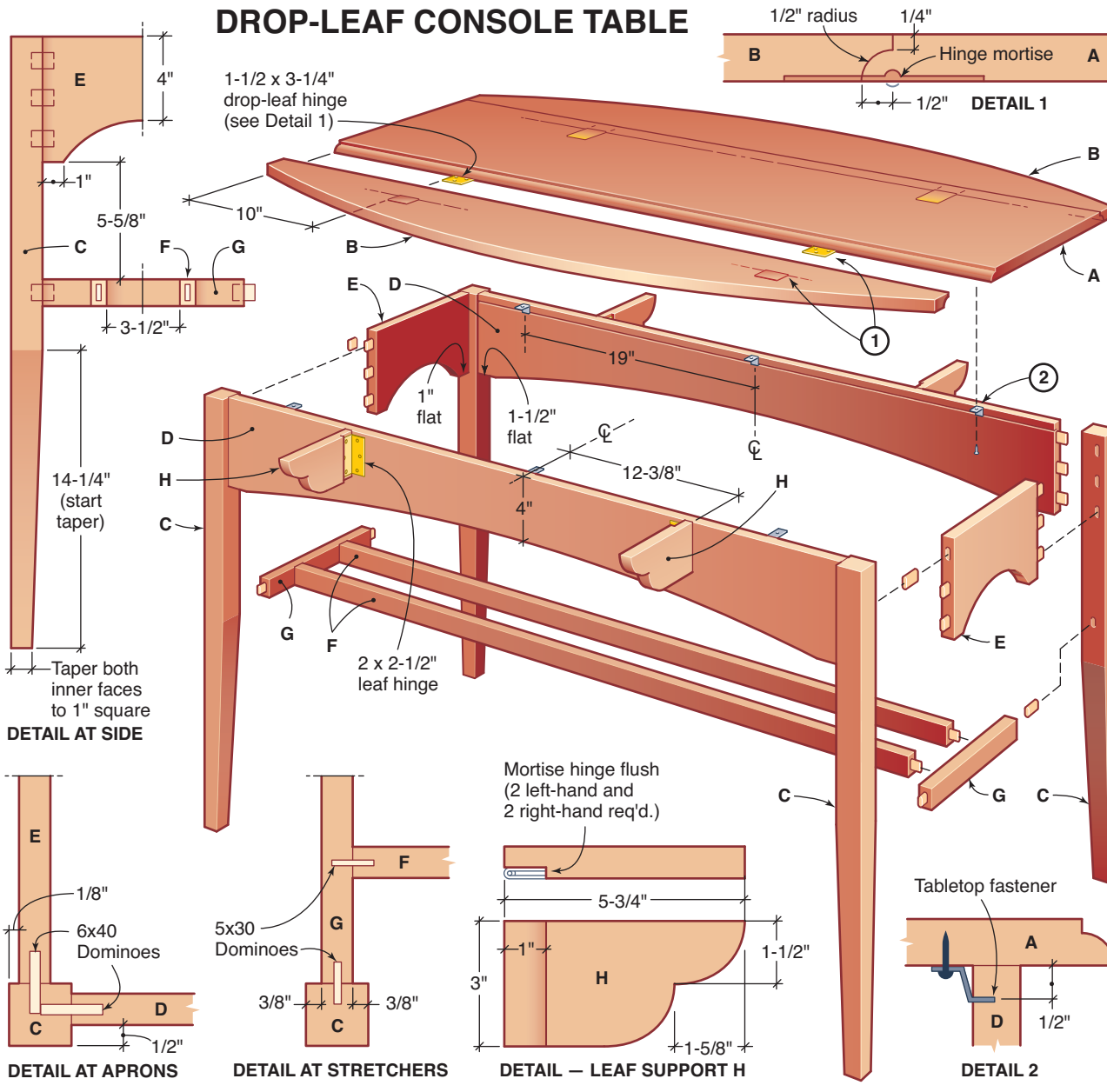
Preliminary pointers

Although we used mahogany for our table, other common species such as maple, oak and cherry are also good choices. Adjust the amount of material you purchase (see Shopping List, p. 14) depending on the quality of the wood. Knots, splits and warps may require you to buy more stock. We've included a little extra in our recommendations for waste and test pieces.

We employed a Festool Domino to cut all of the table mortises. This mortising system is significantly faster (more than 75 percent faster, in my experience) than a router and uses manufactured floating tenons. The Domino has become a shop favorite among the editors and is a *HANDY* Innovation Award winner (see p. 26). However, this expensive tool isn't required for this project; you can make the mortise-and-tenon joints with a router and use

PHOTOS BY LARRY OKREND; ILLUSTRATION BY GABRIEL GRAPHICS;
DESIGN BY DAN CARY, VERN GRASSEL AND LARRY OKREND; CONSTRUCTION BY VERN GRASSEL

DROP-LEAF CONSOLE TABLE



MATERIALS AND CUTTING LIST

KEY	NO.	DESCRIPTION	SIZE
(All parts mahogany)			
A	1	Top	3/4 x 14-1/8 x 48 in.
B	2	Drop leaves	3/4 x 8 x 48 in.
C	4	Legs	1-1/2 x 1-1/2 x 29-1/4 in.
D	2	Front/back aprons	3/4 x 6 x 43-1/2 in.
E	2	Side aprons	3/4 x 6 x 9-5/8 in.
F	2	Long stretchers	3/4 x 1-1/4 x 44-1/4 in.
G	2	Short stretchers	3/4 x 1-1/4 x 9-5/8 in.
H	4	Leaf supports	3/4 x 3 x 5-3/4 in.

SHOPPING LIST

- 4/4 mahogany (24 bf.)
- 8/4 mahogany (7 bf.)
- 5x30 Dominoes (8)
- 6x40 Dominoes (24)
- 2 x 2-1/2-in. leaf hinges (4; Rockler No. 57124)
- 1-1/2 x 3-1/4-in. drop-leaf hinges (4; Rockler No. 29256)
- Tabletop fasteners (6; Rockler No. 34215)
- Finishing supplies (sandpaper, steel wool, stain, varnish, etc.)

WEB EXTRAS To learn how to build and use a tapering jig, go to www.HandymanClub.com/FromHandy

Bend a flexible wood strip to lay out the curves on the drop leaves; then saw close to the line with a jigsaw. Either sand or use a router and template to smooth the edge to the pencil line.

Cut the matching drop-leaf profile with standard 1/2-in. cove and roundover router bits. You'll get the best results using a router table. Use scrap pieces to set up the cuts, and use featherboards to keep the workpiece firmly against the table.

floating or fixed tenons. If you'd prefer simpler joinery methods, other good options are dowels, biscuits and pocket screws. (However, keep in mind that the latter two are not suitable for joining the stretchers.)

Depending on the type of wood you use and its cost, you'll spend about $200 to $400 for materials, hardware and finishing supplies. There's nothing special about the hardware; most home centers will have what you need. (See SOURCES ONLINE for a hardware source and the Shopping List, opposite, for catalog numbers.)

Preparing stock and parts

As with any furniture project, the best way to get the flat, consistent stock necessary to achieve the most precise joinery is to joint and plane rough stock. But if you don't have a jointer and a planer, you can purchase milled stock at most home centers and lumberyards.

At 14-1/8 in., the top is a fairly wide piece, so you may need to edge-join two narrower pieces together. You should be able to make all of the remaining parts from single boards.

Once you've cut all of the parts to length and width, lay out the curves on the drop leaves and aprons and the tapers on the legs. You can cut these before or after cutting the mortises. Just be sure to mark the parts clearly to avoid mistakes, such as the position of the leg tapers.

There's nothing complicated about laying out the curves for the drop leaves. Bend a long 1/8 x 1-in. strip of wood to form a curve; then trace the curve onto the workpiece. Use a band saw or jigsaw to cut the curves just outside the pencil line (photo 1, above). To save time, you can stack pieces, sticking them together with carpet tape, and cut them at once. You can also cut the leaf supports this way. After cutting, sand the edges smooth to the marked line. (An oscillating spindle sander is a great tool for this task.)

Rout the concave/convex drop-leaf joint (often called a rule joint) on the leaves and top with 1/2-in. roundover and cove bits (photo 2). A router table will afford better control and smoother cuts than a handheld router.

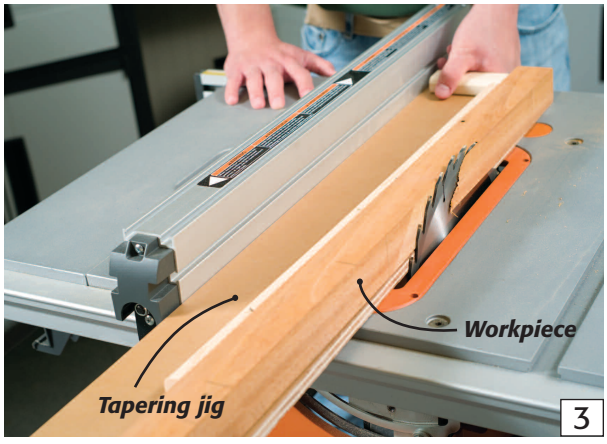
Each leg has two tapered sides that are oriented toward the inside of the table. Using a table saw and tapering jig to make the leg tapers (see WEB EXTRA) is the fastest and most accurate method (photo 3, p.16). Be sure to make the cuts in a sequence so the cut sides face up to prevent the workpiece from rocking on the tapering jig. The legs must be securely clamped or fastened to the jig. You could also use a band saw to cut the tapers and then sand or plane off the saw marks.

Joinery matters

Although we used Domino tenons to join our table (photo 4), the procedure for laying out conventional mortise and tenons (or most other types of joints) is basically the same. Here are a few tips to set you on the right path.

Allow at least 1/2 in. from the top and bottom edges to the first joints on the legs and aprons. The tenons should be no more than one-third the thickness of the stock, so in this case, the tenons are 1/4 in. thick. Be sure the tenons that extend from the aprons into the legs aren't too long so they don't intersect with each other. Use two or three tenons rather than one long one — this will allow for seasonal wood movement. It's always a good idea to cut the mortises a little deeper than the length of the tenons to accommodate excess glue that may be squeezed to the bottom of the joint.

If you opt for pocket screws or dowels, use three for each apron/leg joint and one for each stretcher joint. Biscuits are



We used a table saw tapering jig to cut the leg tapers (see Web Extra). The leg was fastened to the jig with carpet tape. You could also use a band saw or a jigsaw and then sand the cut sides smooth.

Although we used a Festool Domino to cut all of the table's mortises, you could opt to use conventional mortise-and-tenon joints or dowels for all of the joints and use biscuits or pocket screws for the aprons.

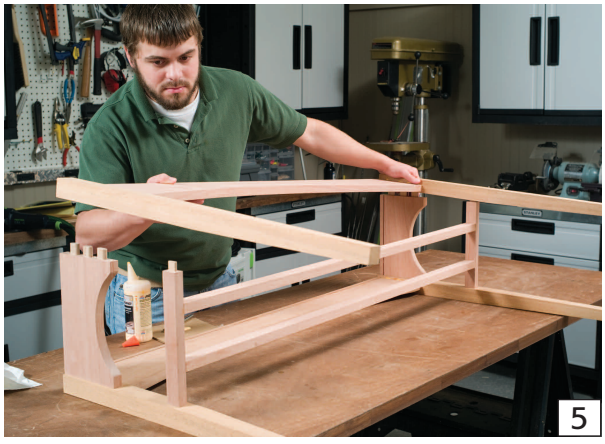
too large for the stretchers, but they're a good choice for the apron/leg joints. Use either No. 10 or No. 20 biscuits.

Fit and finish

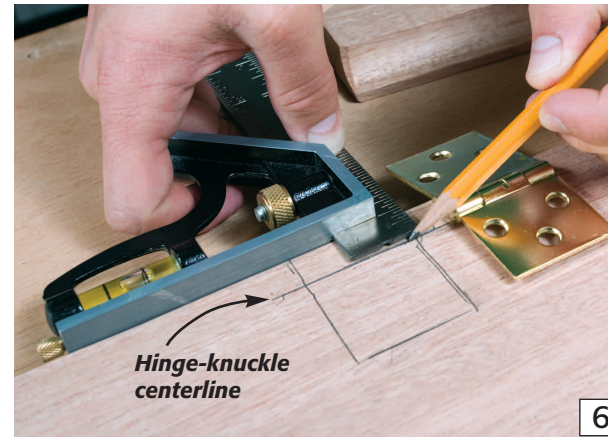
Once you've finished the joinery, dry-fit the table-base parts to check the fit. Then cut the grooves for the tabletop fasters (see drawing, p.14) using a table saw. Glue the base together in stages (photo 5, opposite) to keep the process from becoming too complicated and time-consuming and to ensure that the base is square.

Lay out the mortise positions for the drop-leaf hinges on the top and on the drop leaves (see drawing and photo 6). You can use a small router and a straight bit to cut the mortises, or you can cut them by hand with a chisel.

The hinge mortises in the leaf supports are best cut with a band saw. These parts are too small to safely cut on a table saw. Install the leaf hinges and the support hinges; then attach the top with the tabletop fasteners to check the fit. Disassemble the



To glue together the table, first make subassembly pairs of legs and front/back aprons, and assemble the long and short stretchers. Then add the side aprons and stretcher assembly to one leg/apron assembly. Finally, add the remaining leg/apron assembly as shown here.



The drop-leaf hinge centerline should be positioned 1/2 in. from the bottom edge of the top to allow the leaves to swing freely. Mortise the hinges so they're flush with the table surface.

table and remove all of the hardware before final sanding.

Ease all sharp edges with a sanding block or a router and a small (1/8- or 1/4-in.) roundover bit. Sand the entire table with 220-grit paper before finishing. Check for any unwanted surface glue by wiping the table with mineral spirits. Areas contaminated with glue will appear lighter.

Of course, the finish you apply depends on your preference and skill and the type of wood used. An oil-base stain and wipe-on polyurethane is always a good low-hassle choice. For a truly smooth, lustrous finish, sand with 320-grit paper between coats; then buff the final coat with 0000 steel wool followed by a soft cotton cloth rubbed in the direction of the grain. ◆

SOURCES ONLINE

For online information, go to www.HandymanClub.com/FromHandy and click on SOURCES ONLINE.

Festool (Domino), 888-337-8600
Rockler (hardware), 800-279-4441